

REMARKS

Claims 1, 2, 4, 6, 8, 21, 23-28, 31-35, 38-43, 45-59, and 61-71 are pending, after entry of this Response. Claims 22, 44 and 60 are canceled. Claims 1, 2, 4, 6, 8, 21, 23-28, 31-35, 38-43, 45-59, and 61-71 are under consideration. In light of the following remarks, Applicants respectfully request reconsideration of this application, entry of this Amendment, and allowance of the claims to issue.

35 U.S.C. § 103

Claims 1, 2, 4, 6, 8, 21-28, 31-35, and 38-71 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. publication 2002/0042587 (the '587 publication) in view of U.S. Patent No. 5,792,090 (the '090 patent). The Office Action states that claim 1 is directed to a product comprising a matrix of cross-linked polyacrylamide polymer containing oxygen. The Office Action goes on to state that the '587 publication teaches polymeric cross-linked foam reservoir comprising cellulose derivatives and active agent including anti-infective agents and growth factors. The Office Action states that the foam reservoir is closed cell foam that can be produced chemically and contains gasses including oxygen.

The Office Action concedes that the '587 publication does not teach the chemical reaction that produces the gas in the foam, as claimed in claim 1 of the instant application. The Office Action also concedes that the '587 publication does not teach polyacrylamide polymer as claimed in claims 3 and 37.

The Office Action goes on to state that the '090 patent teaches wound dressings that supply oxygen to the wound for optimal healing and minimization of infection. The Office Action states that the dressing comprises hydrogel or polymeric foam comprising elements that react to generate oxygen that are hydrogen peroxide and catalyst such as magnesium dioxide or enzymes. The catalyst is contained in the foam which absorbs hydrogen peroxide into the foam to produce oxygen.

The Office Action alleges that it would have been obvious to one of ordinary skill in the art at the time of the invention to provide polymeric cross-linked closed cell foam that can be produced chemically as taught in the '587 publication and produce the foam by oxygen gas delivered by the reaction of hydrogen peroxide and catalyst and replace the polymer by polyacrylamide as disclosed in the '090 patent.

It is the burden of the Office to provide a rationale from the prior art for making the specific claimed modification or combination. The Supreme Court recently addressed nonobviousness of “combination” inventions in *KSR Int’l Co. v. Teletex. Inc.*, 127 S. Ct. 1727 (2007) (*KSR*). The Court confirmed that it is legally insufficient to merely point to the various recited elements. Instead, the Office must identify the basis for the alleged modification or combination by one of ordinary skill to arrive at the claimed invention.

As is clear from cases such as *Adams*, a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. This is so because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.

KSR at *37-*38 (emphasis by underlining added).

Moreover, the Supreme Court opined that conclusory statements cannot provide an adequate basis for the alleged modification or combination; the reasoning must be explicit.

Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit. See *In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006) (“Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”).

KSR at *36-*37 (emphasis by underlining added).

Absent this explicit reasoning to support the basis for the modification or combination, the alleged modification or combination cannot support a *prima facie* obviousness rejection for the following reasons.

The Supreme Court has reaffirmed the *Graham* factors for determination of obviousness under 35 U.S.C. 103(a) in *KSR*. The four factual inquiries under *Graham* require examination of: (1) the scope and contents of the prior art; (2) the differences between the prior art and the claims in issue; (3) the level of ordinary skill in the pertinent art; and (4) the objective evidence of secondary consideration. *Graham v. John Deere (Graham)*, 383 U.S. 1, 17-18, 149 USPQ 459, 467 (1966); see also 35 U.S.C. § 103 (2000).

The Court has further recognized that the requirement for a teaching, suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings, which was established by the Court of Customs and Patent Appeals, provides a helpful insight for determining whether the claimed subject matter is obvious under 35 U.S.C. § 103(a). In addition, the Court maintained that any analysis supporting a rejection under 35 U.S.C. § 103(a) should be made explicit, and that it is "important to identify reasons that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" in the manner claimed, because "inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known." *KSR* at 14, 15.

Further, courts have generally recognized that a showing of a *prima facie* case of obviousness necessitates three requirements: (i) some suggestion or motivation, either in the references themselves or in the knowledge of a person of ordinary skill in art, to modify the reference or combine the references' teachings; (ii) a reasonable expectation of success; and (iii) the prior art references must teach or suggest all of the claim limitations. See e.g., *In re Dembiczak*, 175 F.3d 994 (Fed. Cir. 1999); *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998); *Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1573 (Fed. Cir. 1996).

Applicants submit that the '587 publication teaches "foaming a polymeric solution", and not foaming a cross-linked polymeric network (¶ 32 and 36). The '587 publication teaches the formation of a foamed polymeric solution "by extrusion spraying, frothing, compression molding, injection molding, sintering, leaching, or the like. Foam formation may be accomplished by stirring a polymer solution with a high speed, high sheer mixing apparatus and or by an apparatus that injects gas into a solution of the polymer." (¶ 36). The '587 publication also teaches preparation of "a foamed polymer [solution] by decompression expansion [, wherein] a

solution of a volatile blowing agent in molten polymer is formed in an extruder under pressure." (§ 38). The '587 publication also teaches a foam that can be made by a "frothing process[, which] involves dispersing a gas in a fluid that has surface properties suitable for producing a foam. After formation of the foam, it can be, permanently stabilized by crosslinking." (§ 39). The '587 publication teaches the "dimensional stability [of the polymer solution with the incorporated gas] is achieved upon cooling or other cross-linking methods." (§ 38). Therefore, in the embodiments taught by the '587 publication, the gas of the polymer matrix in the '587 publication is introduced into the composition when the polymer solution is a liquid, and before the polymer solution is cross-linked.

Considering that the '587 publication teaches the introduction of a gas into a polymer solution prior to cross-linking the polymer matrix, the '587 publication does not teach or suggest the present invention. The Examiner acknowledges that the '587 publication does not teach polyacrylamide polymer as claimed [in the present application];" however, the Examiner suggests that the polymer of the '587 publication can be "replace[d with] the polymer polyacrylamide as disclosed by US '090." Applicants respectfully submit that there is no suggestion or motivation to make the proposed modification.

Applicants are not arguing for a rigid application of the teaching-suggestion-motivation (TSM) rationale, which requires that a printed statement to be present for a finding of obviousness. Instead, Applicants submit that the Supreme Court acknowledged that the TSM test was one of a number of valid rationales that could be used to determine obviousness. *KSR* at 1727 (2007); see MPEP 2141; *In re Kahn*, 441 F.3d 977, 986, 78 U.S.P.Q. 2d 1329, 1335 (Fed. Cir. 2006). Applicants respectfully submit that there is no suggestion or motivation to make the proposed modification of a polyacrylamide polymer of the '090 patent in the foam of the '587 publication, and in fact, the '587 publication teaches away from use of polyacrylamide by requiring the gas be introduced into a liquid polymer solution prior to the cross-linking of the polymer solution.

Modification of the '587 publication by implementation of polyacrylamide polymer to create a polyacrylamide foam matrix as taught in the '090 patent would render the '587 publication unsatisfactory for its intended purpose. According to the U.S. Court of Appeals for the Federal Circuit, "[i]f [the] proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed invention." (*In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 125 (Fed. Cir. 1984); see MPEP

2143.01). Attempts to create a foam matrix by the methods disclosed in the '587 publication with polyacrylamide, as taught in the '090 patent, would result in a foam composition unsatisfactory for its intended purpose. More specifically, formation of a foam made from polyacrylamide by the methods of the '587 publication would result in the formation of a liquid gelatinous mass.

According to the teaching of the '587 publication, a polymer is mixed in a solution, a gas is introduced into the polymer mixture, and the polymer mixture with the incorporated gas is cross-linked to form a foam matrix. Using this method of the '587 publication, in view of the '090 patent, if polyacrylamide polymer were mixed in a solution, then oxygen were introduced into the polyacrylamide polymer solution, and the polyacrylamide polymer mixture with the incorporated gas were attempted to be cross-linked, the polyacrylamide would not cross-link because oxygen retards the polymerization of polyacrylamide, and a poorly-cross-linked, (if any cross-linking would occur), liquid gelatinous mass may result.

It is well known in the art that polyacrylamide does not sufficiently polymerize in the presence of oxygen. Diffusion of atmospheric oxygen into a polyacrylamide solution can detrimentally affect the cross-linking of polyacrylamide polymers. (Sambrook and Russell, Molecular Cloning: A Laboratory Manual, Vol. 3, p. A8.44 –45 (copy previously submitted). As shown in this protocol, the polyacrylamide solution is protected from exposure to atmospheric air (which is approximately 20% oxygen) so as to eliminate the amount of oxygen contacting the polyacrylamide solution (*Id.*) The protocol also refers to de-gassing, which is a common step used for removing gases from an initial solution of acrylamide polymers to prevent the interference by oxygen in the polymerization reaction. (*Id.*) Considering the inability to cross-link polyacrylamide in the presence of oxygen, a person of ordinary skill in the art would not be motivated to intentionally introduce oxygen, according to the teaching of the '587 publication, to a polyacrylamide solution, and not at any time while the polyacrylamide solution is liquid.

Furthermore, the detrimental effect of the presence of oxygen in a polyacrylamide solution would result in the retardation of the polyacrylamide cross-linking and the formation of a poorly cross-linked, if any cross-linking would occur, liquid, gelatinous mass. This liquid, gelatinous mass would not function in a satisfactory fashion for its intended purpose, and not as a drug delivery matrix of the '587 publication. Attempts to create a foam matrix by the methods disclosed in the '587 publication with polyacrylamide as taught in the '090 patent would result in a foam composition unsatisfactory for its intended purpose, and thus, no suggestion or motivation exists to

make the proposed invention. See *In re Fritch*, 972 F.2d 1260, 1265 n.12, 23 U.S.P.Q.2d 1780, 1783 n.12 (Fed. Cir. 1992) (“This court has previously found a proposed modification inappropriate for an obviousness inquiry when the modification rendered the prior art reference inoperable for its intended purpose.”) (citing *In re Gordon*, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984)); *Schneider (Europe) AG v. Scimed Life Sys., Inc.*, 852 F. Supp. 813 (D. Minn. 1994) (“Where obviousness is based upon a modification of a reference that destroys the intended purpose or function disclosed in a reference, there is no motivation for engaging in the modification.”) (citing *In re Gordon*, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984)). As a result, Applicants respectfully request the Examiner to withdraw this rejection.

The Examiner states “that U.S. ‘090 is relied upon for the solely [sic] teaching of catalyst/peroxide reaction to produce oxygen in a wound dressing matrix made of polyacrylamide.” See Office Action, page 8, first paragraph.

The construction of the cited reference to include the elements of the present invention requires hindsight reasoning, which the Federal Circuit has explicitly rejected. See *In re Fritch*, at 1260 (“Here, the Examiner relied upon hindsight to arrive at the determination of obviousness. It is impermissible to use the claimed invention as an instruction manual or ‘template’ to piece together the teachings of the prior art so that the claimed invention is rendered obvious.”). Therefore, independent Claims 1, 38, and 39 would not be rendered obvious by the disclosures and teachings of the ‘587 publication and the ‘090 patent. Likewise, the claims that depend from independent Claims 1, 38, and 39 would not be rendered obvious. See *In re Fine*, 5 U.S.P.Q.2d 1569, 1600 (Fed. Cir. 1988) (“Dependent claims are nonobvious under section 103 if the independent claims from which they depend are nonobvious.”).

In this analysis, and as previously discussed above, we must be mindful of the repeated warnings of the Supreme Court as to the danger of hindsight bias. See, e.g., *Graham*, 383 U.S. at 36 (consideration of secondary factors “serve[s] to guard against slipping into use of hindsight and to resist the temptation to read into the prior art the teachings of the invention in issue” (internal quotations and citations omitted)); *In re Kotzab*, 217 F.3d 1365, 1369 (Fed. Cir. 2000) (“[T]he very ease with which the invention can be understood may prompt one to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher.” (internal quotations omitted)). Thus, Applicants respectfully request the Examiner to withdraw this rejection.

Formation of an oxygen-containing polyacrylamide matrix occurs if the polyacrylamide matrix is first cross-linked, and oxygen is introduced into the matrix following cross-linking of the polyacrylamide polymers. Applicants submit that the presently claimed invention is patentable over the cited prior art. The Examiner, in citing MPEP § 2113, relies exclusively the first portion of MPEP § 2113, citing In re Thorpe for stating the proposition that:

even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself'. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. 777 F.2d 695, 698 (Fed. Cir. 1985).

However, it is the remainder of MPEP § 2113 that is applicable to the presently pending claims. According to MPEP § 2113, In re Garner states that "[t]he structure implied by the process steps should be considered when assessing the patentability of product-by-process claims over the prior art, *especially where the product can only be defined by the process steps by which the product is made*, or where the manufacturing process steps would be expected to impart distinctive structural characteristics to the final product." 412 F.2d 276, 279 (C.C.P.A. 1979) (emphasis added); See MPEP § 2113. In the case where the polymeric matrix comprises polyacrylamide, the step of cross-linking must occur prior to the addition of oxygen, and a teaching of gas incorporation prior to cross-linking is not relevant.

The Examiner stated that "cross linking of the polymer matrix before or after addition of oxygen does not impart patentability to the claims because it has been held that it is *prima facie* obvious to reverse the order of the prior art process steps . . . selection of any order of mixing ingredients is *prima facie* obvious. Applicants failed to show superior and unexpected results obtained from cross-linking before forming oxygen or after forming oxygen in the matrix." Applicants have repeatedly argued that an oxygen-containing polyacrylamide matrix cannot be formed if oxygen is added to a liquid polyacrylamide solution. It is well known in the art that polyacrylamide does not sufficiently polymerize in the presence of oxygen. It is not *prima facie* obvious to reverse the steps of a method if that is the only order of the steps that results in the final product. Applicant is not reversing the order of the steps of the '587 publication; Applicant's method of cross-linking before adding oxygen is the order of steps that results in a polyacrylamide material containing oxygen. Selection of any order of mixing ingredients may be *prima facie*

obvious if the order of mixing makes no difference to the final product. Without cross-linking the polyacrylamide solution first, no oxygen can be contained by the polyacrylamide matrix, because if the oxygen is added first to the polymeric solution, the next step of cross-linking will not occur. Creation of an oxygen-containing polyacrylamide matrix can only occur if the polyacrylamide matrix is first cross-linked, and oxygen is introduced into the matrix after cross-linking of the polyacrylamide polymers. Given the technical limitations associated with cross-linking polyacrylamide in the presence of oxygen, the structure implied by the process steps must be considered when assessing the patentability of the claims. There is no reason for Applicants to provide "superior and unexpected results obtained from cross-linking before forming oxygen or after forming oxygen in the matrix" because the above statements cited for supporting *prima facie* obviousness are not applicable to the currently pending invention. Without cross-linking prior to production of oxygen, an oxygen-delivery polyacrylamide matrix is not possible. Therefore, Applicants respectfully request the Examiner to withdraw this rejection.

The '587 publication does not teach or suggest a matrix that functions to deliver oxygen. There is no teaching in the '587 publication indicating that the gas incorporated into the polymer foam matrix would transfer from the matrix. The gas in bubbles within the polymer matrix of the '587 publication is not designed to be transferred from the polymer matrix; the bubbles are designed to provide a surface area greater than an unfoamed matrix. The '587 publication teaches that the "gas bubbles act as inert filler, increasing the surface area of the matrix without introducing the drawbacks of common 'inert' fillers." (§ 37). The gas bubbles of the '587 publication are inert, meaning that they "lack[] a usual or anticipated chemical or biological action." (Merriam-Webster's Online Dictionary available at (<http://www.merriamwebster.com/dictionary/inert>)). The gas bubbles of the '587 publication lack a chemical or biological function. According to the '587 publication, the gas bubbles are a structural feature of the polymer foam matrix of the '587 publication to increase the surface area of the foam. The transfer of gas from the polymer matrix of the '587 publication would defeat the purpose of having gas bubbles in the polymer matrix because the transfer of gas from these bubbles would result in the collapse of the bubbles and a decrease in surface area. Therefore, the transfer of gas from the bubbles of the '587 publication would contradict the structural purpose of the bubbles in the foam of the '587 publication. There is no teaching in the '587 publication that the gas can be

transferred from polymer matrix. The '587 publication does not teach or suggest an oxygen-delivery matrix.

In his Declaration under 37 C.F.R. § 1.132, filed in response to the Office Action dated September 14, 2006, Dr. Bruce Gibbins showed that the '587 publication cannot provide a teaching, alone or in combination with the '090 patent, that renders Applicants' currently claimed invention obvious. The Declaration shows that articles made using the methods taught by the '587 publication in Examples 1 and 2 results in a polymer-based article that does not provide oxygen as does an embodiment of the present invention (the AcryMed matrix) does.

As shown in Experiment 1 of the Declaration (No. 6 Experimental Data), the '587 publication articles did not deliver as much oxygen as the AcryMed matrix. The '587 publication articles, made as described as Batch 1 and Batch 2, delivered oxygen at the level of only 35 mmHg and 15 mmHg, respectively, compared to the AcryMed matrix oxygen delivery at 196 mmHg. (See Table 1, the difference between the starting values at Time 0 and the values at 30 minutes). The Figures 1-3 show flat lines for the delivery of oxygen by the '587 publication articles (Figures 1 and 2), and an essentially static release of oxygen. In contrast, the AcryMed matrix delivers an increasing amount of oxygen over time (See Figure 3).

Experiment 2 shows that when the same sized materials are compared, the amount of oxygen and the delivery of oxygen by the AcryMed matrix is different from that of the '587 publication article. In a measure of absolute oxygen content, (See Table 2) the '587 publication articles contained oxygen that was released in a 24 hour period, of an average of 19.52 mmHg for Batch 1 and 4.6 mmHg for Batch 2. The AcryMed matrix contained an average of 244.15 mmHg of deliverable oxygen. The difference in amount of oxygen released for the AcryMed matrix is 12.5 times that of the '587 publication article (Batch 1) and 53.1 times that of the '587 publication article (Batch 2). The oxygen % of material, wt/wt, is very different for the AcryMed matrix compared to any of the '587 publication articles, 0.23% and 0.37% for the AcryMed matrices compared to less than 0.0005% for the '587 publication article (See Table 2, last column).

The look and feel of the two compositions are also different. The two batches of '587 publication articles, which have different freeze/thaw steps, had similar appearances. As shown in Figure 4 A, the '587 publication article appears as a gelatinous slab of polymer material with very small closed-cells within the polymer material. In contrast, the AcryMed matrix has many, regularly sized closed-cells and the majority of the volume of the material is closed cells, not

polymer material. These differences are also indicated in Table 2, where a 60 mm diameter sample of both batches of the '587 publication article has a weight between 5.4-6.4 grams, whereas a 60 mm diameter sample of the AcryMed matrix has a weight of 0.22-0.37grams.

After 24 hours of soaking in water, the changes to the '587 publication article and the AcryMed matrix were noticeable. The '587 publication article became transparent and the structural integrity of the material was sharply decreased. The AcryMed matrix maintained its general appearance with a decrease in size of the closed-cells, and thus resulting overall size, but maintained its structural integrity.

Applicants submit that there are many differences between the article as taught by the '587 publication and the article as currently claimed by Applicants. Thus, the '587 publication cannot provide a teaching that results in a material that renders Applicants' currently claimed invention obvious. The addition of the teachings of the '090 patent does not cure the deficiencies of the '587 publication's teaching. In fact, a direct substitution of polyacrylamide for the methods taught in Example 1 and 2 of the '587 publication would lead to an article that is not polymerized because oxygen inhibits the polymerization of acrylamide. For at least these reasons, Applicants submit that neither alone nor in combination do the cited references render the currently claimed invention obvious.

The teachings of the '090 patent do not cure the deficiencies of the '587 publication. The Examiner states that the '090 patent "is relied upon for the solely teaching of catalyst/peroxide reaction to produce oxygen in a wound dressing matrix made of polyacrylamide." Applicants respectfully submit that the only teaching of polyacrylamide in the '090 patent is an occlusive covering that provides a layer for moisture provision (Col- 4, lines 18-22) The occlusive covering is not capable of delivery of oxygen, and does not provide a teaching or suggestion of oxygen delivery. The '090 patent teaches a reservoir that, among other alternatives, "may be a sponge-like or open-celled foam of natural, synthetic or mixed natural/synthetic origin." (Col. 5 lines 59-60). However, there is no teaching or suggestion in the '090 patent of closed cells, or the entrapment of oxygen within closed cells. In addition, there is no teaching of polyacrylamide specifically for this reservoir, nor is there a teaching of closed cells containing oxygen at any site in the reference. Applicants respectfully submit that, although the '090 patent may disclose an oxygen generating wound dressing, the '090 patent does not teach or suggest a polyacrylamide matrix having oxygen in closed cells within the cross-linked polyacrylamide polymer network.

Even if there were a reason to combine only the teaching of a catalyst and reactant from the '090 patent, there is no teaching of how to form closed cells of oxygen in a polyacrylamide matrix for the delivery of oxygen by the matrix. The combination of the catalyst from the '090 patent with a liquid polymeric solution from the '587 publication being a polyacrylamide solution, followed by addition of the reactant with the catalyst/liquid polyacrylamide solution to form oxygen may result in a foamy liquid solution but it would not result in Applicants' currently claimed invention. The foamy liquid solution would not cross-link and would not resemble either the device of the '587 publication, the '090 patent device or Applicants' currently claimed invention. The catalyst/reactant portion of the '090 patent cannot be combined with the teachings of the '587 publication to provide a teaching or suggestion that renders Applicants' currently claimed invention obvious. Therefore, neither the '587 publication nor the '090 patent, either individually or combined, teaches or suggests the presently claimed invention. Applicants respectfully request the Examiner to withdraw this rejection.

The foregoing is a complete response to the Office Action dated September 18, 2008. Applicants respectfully submit that at least Claims 1, 2, 4, 6, 8, 21, 23-28, 31-35, 38-43, 45-59, and 61-71 are patentable. Early and favorable consideration is solicited.

Applicants file this response solely to facilitate prosecution. As such, Applicants reserve the right to pursue claims of broader or similar scope as originally filed in a continuation application or other application after allowance of the present application. Applicants do not concede that the current or past rejections are correct and reserve the right to challenge such rejections later in prosecution or on appeal. Accordingly, any amendment, argument, or claim cancellation is not to be construed as abandonment or disclaimer of subject matter. Because certain of the current amendments may include broadening amendments, Applicants respectfully request the Examiner to revisit any previously reviewed references cited in this Application to further ensure that the currently pending claims remain patentable over any previously reviewed references.

A credit card payment submitted via Form PTO-2038 in the amount of \$1920.00 (representing \$810.00 for the RCE fee and \$1110.00 fee for Extension of Time (3 months), a Request for Continued Examination (RCE) Transmittal, and a Request for Extension of Time (3 months) are enclosed. This amount is believed to be correct; however, the Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 14 0629.

If the Examiner believes there are other issues that can be resolved by a telephone interview, or that there are any informalities that remain in the application which may be corrected by the Examiner's amendment, a telephone call to the undersigned attorney at (678) 420-9248 is respectfully solicited.

Respectfully submitted,

BALLARD SPAHR ANDREWS & INGERSOLL, LLP

/MaryAnthonyMerchant Reg.No.39771/

Mary Anthony Merchant, Ph.D.

Reg. No. 39,771

BALLARD SPAHR ANDREWS & INGERSOLL, LLP

Customer Number 23859

(678) 420-9300 Phone

(678) 420-9301 Fax

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I hereby certify that this correspondence, including any items indicated as attached or included, is being transmitted by EFS-WEB on the date indicated below.

/MaryAnthonyMerchant Reg.No.39771/

Mary Anthony Merchant, Ph.D. Reg. No. 39,771

16 March 2009

Date